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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional)  <b>JRL-3772-37</b> <b>Confirmation No. 2732</b>	
	Application Number  10/590,937		Filed  August 28, 2006
	First Named Inventor  TIDWELL		
	Art Unit  2471	Examiner  Mohebbi, Kouroush	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p>			
<p>I am the</p> <p><input type="checkbox"/> Applicant/Inventor</p> <p><input type="checkbox"/> Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> Attorney or agent of record      33,149 (Reg. No.)</p> <p><input type="checkbox"/> Attorney or agent acting under 37CFR 1.34. Registration number if acting under 37 C.F.R. § 1.34 _____</p>		 Signature John R. Lastova _____ Typed or printed name 703-816-4025 Requester's telephone number September 15, 2010 Date	
<p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*</p> <p><input checked="" type="checkbox"/> *Total of 1 form/s are submitted.</p>			

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

Paul TIDWELL

Appl. No. 10/590,937

Filed: August 28, 2006



Atty. Ref.: 3772-37; Confirmation No. 2732

TC/A.U. 2471

Examiner: Mohebbi, Kouroush

For: OPTIMISING RESOURCE USAGE IN A PACKET SWITCHED NETWORK

\* \* \* \* \*

September 15, 2010

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**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

All claims stand rejected under 35 U.S.C. §103 for obviousness based on previously-applied Vimpari. This rejection is respectfully traversed.

Vimpari describes processing variable-length packets and keeping the error rate of basic packets included in real time transport protocol (RTP) packets communicated in a packet-switched telecommunication network at a desired level. Specifically, the number of basic packets to be included in an RTP packet is changed according to the frame error rate (FER) of the last received RTP packet if it either exceeds or drops below a predetermined threshold value. See Abstract. The better the conditions on a communications connection, the more basic packets that can be included in a single RTP packet. If the conditions on the communications connection become worse, then the number of basic packets to be included in a single RTP packet is reduced. See [0017].

The claimed technology is concerned with optimizing bandwidth use on an RTP link. A packet loss rate for the link is monitored to determine whether it is unacceptably high. The

sending rate is then adapted by re-packetizing media (1) to increase the size of packets sent over the link if the packet loss rate is too high in order to reduce the packet header overhead, or (2) to decrease the size of the packet sent over the link when the rate of packet loss is within acceptable limits to reduce the transmission delay over the link.

In [0017], Vimpari teaches the opposite of what is claimed:

The idea of the invention is basically as follows: A hardware arrangement according to the invention makes use of adaptively varying packet lengths on the RTP level. The better the conditions on a communications connection, the greater the number of data blocks that can be attached to a single RTP packet to be transferred [i.e., increased packet size]. If, on the other hand, the conditions on the communications connection become worse, the number of data blocks, hereinafter called basic packets, to be included in a single RTP packet is reduced [i.e., decreased packet size]... Conversely, in good conditions it is possible to benefit from the decrease of the average proportion of header data per one basic packet in the longer RTP packets and to transfer more user data per unit time on the same physical transfer channel. (Emphasis added with Applicant commentary in brackets).

The Examiner nevertheless argues that even though Vimpari decreases packet size when the rate of packet loss is high—directly contrary to what is claimed—the claimed different approach is simply one of “different options of a configuration option” that may be selected. In support, the Examiner contends that Vimpari’s paragraph [0008] discloses a configuration in which packet size is increased by adding more packets to the frame when the rate of frame loss is high.

Paragraph [0008] is part of the background section of Vimpari that addresses the “capacity-consuming effect of the [standard RTP] header” and notes that it could be “reduced by including in one packet more data blocks containing advantageously consecutive sound samples. One packet could contain e.g. three such data blocks.” But Vimpari then describes that “the frame error rate (FER) could prove problematic with this method,” with frame loss becoming

unacceptably high. In fact, Vimpari teaches away from the “problematic method” because Vimpari is only concerned with reducing the frame error rate for an individual call, and not with improving conditions on an RTP link for all users of that link (“[a]s a high number of packets must be rejected because of the high FER value, less data will be received per unit time” last sentence of [0008]). See also [0018].

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). Teaching away was one indicia of nonobviousness recognized explicitly by the Supreme Court in its *KSR* decision recently affirmed by the Federal Circuit decision *Crocs, Inc. v. U.S. Int’l Trade Comm’n.*, 598 F.3d 1294 (Fed. Cir. 2010). Clearly, paragraphs [0008], [0017], and [0018] in Vimpari discourage a person of ordinary skill from following the path of the inventors in this case of increasing the size of packets sent over the link when the rate of packet loss is unacceptably high or decreasing the size of packets sent over the link when the rate of packet loss is within acceptable limits as specified by the claims.

Having warned the skilled person to avoid the undesirable approach in [0008] of increasing packet size when the frame error rate is high, (see also [0018]), Vimpari instructs the skilled person to reduce packet size when the frame error rate is high. Again, this teaching is directly opposite to what is recited in claim 1. Accordingly, Vimpari’s invention outlined in [0017] does not teach or suggest increasing packet size as a result of packet loss being unacceptably high.

The Examiner argues that the language in paragraph [0036] of Vimpari, “There may advantageously be one threshold value per each RTP packet length so that the RTP packet length can be changed up or down by one basic packet e.g. according to the FER (frame error rate)

measured,” (emphasis added by the Examiner), makes Vimpari’s teaching away simply a “design choice.” Applicants disagree. First, altering the packet length to increase or decrease the number of data packets contained as a result of a measured frame error rate is not the issue. Rather, the differences at issue here lie in the specific conditions employed to determine whether to increase or decrease the packet length. Second, the claims specify increasing the packet length when the rate of packet loss is high, and decreasing the packet length when the rate of packet loss is within acceptable limits. The only embodiment disclosed by Vimpari decreases the packet length when conditions worsen and increases the packet length when conditions improve.

The Examiner also refers to paragraph [0038] of Vimpari quoting: “The number of basic packets to be included in the RTP packet can be either increased or decreased. If the frame error rate indicates an increase in the number of errors...”(emphasis added by the Examiner).” Once again, the quoted sentence simply states that the packet length can be either increased or decreased, but without specifying the conditions that must be met to result in either an increase or a decrease. But the second sentence in this paragraph (not quoted by the Examiner) goes on to explain that “[if the FER increases]... the number of basic packets is advantageously decreased by one in the next RTP packet sent.” Emphasis added. Paragraph [0038] also further specifies that if the FER decreases, “the number of basic packets to be included in the RTP packet is increased advantageously by one in the next RTP packet sent.” When read in context and as a whole as required by the Federal Circuit, the Vimpari disclosure provides no teaching, suggestion, or motivation for person of ordinary skill in the art to reverse the conditions upon which the packet length is increased or decreased.

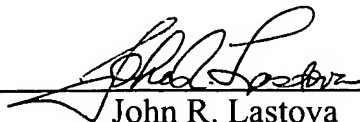
The Examiner also refers to paragraph [0008] of Vimpari and states that this “describes the method that is well known in the art, increasing packet length sent over the link when the

frame error rate (FPR) is high, in other words, decreasing the packet length when the length condition improves.” Applicants disagree with the Examiner's interpretation of this paragraph. Paragraph [0008] only states that packet length can be increased and that increasing packet length beyond a certain point will push the FER to an unacceptable level. Again, this passage *teaches away* from the claims because it states that an increase in the packet length will result in an increase in the error rate.

There is a fundamental difference between the claimed approach and that in Vimpari. Vimpari focuses on an individual call connection rather than specific links where each call connection has an uplink and a downlink. Consequently, Vimpari is not concerned with reducing bandwidth use over the radio interface, but rather with reducing delays for a particular call using that radio interface. Although Vimpari's approach may improve service for a one user, it also detrimentally impacts the service other active users who are communicating with the same MRF node. On the other hand, the claimed technology reduces overall bandwidth useage which increases the radio bandwidth available for other users.

The final rejection should be withdrawn and the application passed to allowance.

Respectfully submitted,  
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